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# A GRAPHIC SUMMARY OF 



Miscellaneous Publication No. 705 Issued October 1949

UNITED STATES DEPARTMENT OF AGRICULTURE Office of Foreign Agriculfural Relations - Washington, D. C.

This publication contains a series of maps and graphs, showing the geographic distribution of agricultural production and trade, world population, and such physical factors as land forms, vegetation, soils, and annual rainfall. An analysis of the distribution dot maps of the world's more important crops and farm animals as related to the physical factors and trade shows the position occupied by the United States in the world's agricultural production and markets. The introductory text contains a comparison of United States agricultural production and population with that of the more important agricultural countries of the world.

## ACKNOWLEDGMENTS

The author wishes to acknowledge the cooperation that was given by following employees in Office of Foreign Agricultural Relations. To C. M. Purves, Assistant Chief, Regional Investigations Branch, who furnished data and text for the selfsufficiency and food-level maps; and to Regina H. Boyle; Thelma L. Willahan; Anna Jones; and Edna Been, of the International Commodities Branch, for special data for the international-trade maps; and to N. P. Guidry, cartographer, who prepared the cross-hatch maps, charts, and international-trade maps assisted by W. Cratty, cartographer, and Thelma Cox, draftsman. Ruth P. Schottroff prepared much data, all the dot maps, compiled the population map and wrote its accompanying text; and Alice I. Fray edited the text.

# UNITED STATES DEPARTMENT OF AGRICULTURE 

MISCELLANEOUS PUBLICATION NO. 705

Washington, D. C.

# A GRaphic summary of world agriculture 

By Reginald G. Hainsworth, Principal Economic Geographer, Office of Foreign Agricultural Relations

## INTRODUCTION

THE PRODUCTION of crops throughout the world is derived from about 2.47 billion acres of cultivated land, or approximately 7.5 percent of the earth's 32.6 billion acres of land (not including the Antarctic, and the arms of the sea extending inland). It has been estimated that another 7.5 percent of this land is used for such agricultural purposes as permanent meadows and pastures.

The cultivated land of the world is very unevenly distributed among countries and continents and in relation to population. Adding to this imbalance are the effect of such factors as variance in crop yields, the land use pattern, kinds of soils, and condition of the land.

Since the largest part of the world's food supply and agricultural raw materials for industry are produced on the cultivated land, it is very significant in measuring the agricultural productive capacity as well as that of the industries closely associated with agriculture in the various countries in the world.

Table 1.-Total land area, culivated land, and population, by continent or counry, percentage of the world total

| Continent or country | Percentage of- |  |  |
| :---: | :---: | :---: | :---: |
|  | World land area | World cultivated land | World population |
| Asia (excluding USSR) | Perrent 18. 6 | Percent 32. 9 | Percent 53. 1 |
| North America | 17. 3 | 21. 2 | 8. 2 |
| Soviet Union | 16. 1 | 16. 8 | 7. 6 |
| Europe (excluding USSR) | 3. 7 | 16. 3 | 17. 9 |
| Middle and South America | 13. 2 | 5. 7 | 5. 0 |
| Africa | 24. 1 | 5. 6 | 7. 7 |
| Australia and Oceania | 7. 0 | 1. 5 | . |
| Total. | 100. 0 | 100. 0 | 100.0 |

[^0]The population of the world is about 2,264 million persons. Dividing the estimated cultivated land ( 2,470 million acres) by this figure gives an average area of cultivated land per capita throughout the world of about 1.1 acres.

Asia (excluding USSR) has more than one-half of the world's population with less than one-third of the cultivated land area. North America, on the other hand, with only about 8 percent of the world's population, has more than 21 percent of the cultivated land. In the remaining continents, excluding Australia and Oceania, percentages of the world's cultivated land and population are about equal. Australia and Oceania, have the most favorable balance, but this area has little cultivated land.

The two countries having the largest areas of the world's cultivated land are the United States. with 17.6 percent, and the Soviet Union, with 16.S. In relation to cultivated land, populations in these countries are small-as table 2 shows.

The 15 countries given in table 2 have more than 75 percent of the world's cultivated land and more than 62 percent of the population of the world. In the United States the area of land in cultivated crops amounts to 22.8 percent of its land area and to 17.6 percent of all the cultirated land in the world. This is as much cultivated land as Europe (excluting USSR) has, yet the population of Europe is about three times as great.

The United States, the Soriet Union, India, and China have 1,408 million acres of cultivated land. or about 57 percent of the world's total cultivated land.

The combined population of these $\&$ countries amounts to more than 1,100 million persons, about half of the world population. Among these countries, however, the acres of cultivated land per person varies widely, from 0.29) acre per person in China to 3.13 aeres per person in the L'nited States. Of the 15 countries tabulated, Australia has the lowest percentage of its cotal land area cultivated-only 1.7 percent-with 4.7 acres per person. Poland las the largest percentage nearly 50 pereent - but has less than 1.5 ateres per person.

The Guited states has a greater copp acreave
per capita than any of the other great nations of the world, except the sparsely settled countries of Canada, Australia, and Argentina. The large amount of cultivated land, plus the additional land used for other agricultural activities, is in striking contrast to the agricultural economy of those countries that have great densities of population. (See population map, fig. 20, and cultivated lands of the world, fig. 8.)

In this publication the cultivated land of the world includes the area in field crops, forage, gardens, and tree and bush crops (excluding uncultivated growth), rotation meadows, and fallow land. Permanent meadows, pastures and rangelands, woods, forests, unproductive land, and socalled uncultivated productive land (unused arable land) have been excluded wherever possible.

Where the livestock industry contributes a large share of the agricultural economy in a country, there are usually large acreages of permanent meadows, pastures, and range lands, which are not cultivated. In such countries the population dependent on agriculture, as represented by cultivated land, appears to have a greater density than would be the case if all types of agricultural land were classified as cultivated.

The United States not only has the largest area of cultivated land in the world but also has extensive areas of permanent meadows, pastures, and range lands, which are used for grazing livestock. The abundant supply of meat products derived from the livestock industry, plus the crops produced on the cultivated land, gives the United States a well-balanced agricultural program, which only a few countries are fortunate enough to have.

The population in the United States has increased nearly 100 percent during the past 50 years-from slightly over 75 million to more than

148 million persons-while the cultivated land increased only about 10 percent. This greater population pressure upon the food supply has been more than offset by the improved methods of farming, resulting in increased yields per acre of crops as well as larger outputs of products per animal unit.

Cereals are the most important crops grown in the world. The total acreage of wheat, rice, corn, oats, barley, and rye averaged 1.21 billion acres in the period of 1935-39 and 1.17 billion acres in the 1946-48 period. Almost half of all cropland is devoted to cereals. Wheat, rye, and rice are utilized mainly for human consumption, whereas corn, oats, and barley are used mostly for feeding livestock.

In addition to the acreage of the cereal crops shown in table 3, the world acreage of potatoes averaged 52.8 million acres for the period of 1935-39 and 51.4 million acres for the 1946-48 period. Sugar-beet acreage averaged 8.1 million acres for 1935-39 and 8.0 for 1946.

The actual area of land in the world still adaptable for agricultural purposes cannot be adequately measured by any one criterion. In addition to the cultivated land actually used and now reported in various statistical data, there is still some cultivated land not reported, much land that could be plowed and cultivated, and some that could be developed as pastures for livestock grazing. The extent of potential cultivated land will be determined to a great degree by the types of soils, topographic condition of the land, length of the growing season, annual and seasonal rainfall, as well as transportation and cultural background of the people of the country in which the land is being brought into production.

Table 2.-Distribution of cultivated land among the 15 countries having more than 75 percent of the world's total cultivated land

| Country | Acres cultivated | Cultivated land as percentage of total land | Cultivated land per capita | Percentage of world cultivated land |
| :---: | :---: | :---: | :---: | :---: |
| United States | Thousands 435, 000 | Percent | Acres | Percent |
| Soviet Union | 414, 000 | 22.8 7.9 | 3. 13 2. 43 | 16. 8 |
| India - - - | 382, 610 | 37. 9 | . 98 | 15. 5 |
| China ${ }^{\text {1- }}$ | 177, 718 | 13. 8 | . 29 | 7. 2 |
| Argentina | 64, 395 | 9. 3 | 4. 56 | 2. 6 |
| Canada. | 63,385 | 2. 9 | 5. 29 | 2. 5 |
| Germany | 49, 918 | 42. 8 | . 72 | 2. 0 |
| France -- | 49, 338 | 36. 3 | 1. 22 | 2. 0 |
| Poland | 47, 219 | 49. 2 | 1. 47 | 1. 9 |
| Spain | 44, 556 | 35. 6 | 1. 65 | 1.8 |
| Iran-- | 40, 795 | 10. 2 | 2. 47 | 1. 6 |
| Manchuria and Jehol | 38, 386 | 11. 9 | . 89 | 1. 5 |
| Italy | 35, 610 | 47.9 | . 77 | 1.4 |
| Australia | 34, 865 | 1. 7 | 4. 71 | 1.4 |
| Total | 1,877, 795 |  |  | 75. 8 |

[^1]Table 3.-Acreage of 6 principal grains by continent or country, 1935-39 and 1946-48 averages
[Million acres]

| Continent or country | Wheat |  | Rice |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1935-39 average | $\begin{aligned} & \text { 1946-48 } \\ & \text { average } \end{aligned}$ | 1935-39 average | 1946-48 average |
| North America | 84. 2 | 96. 6 | 1. 4 | 2. 5 |
| South America | 20.5 | 17. 2 | 3. 0 | 5. 2 |
| Europe | 74.4 | 66. 7 | . 6 | . 6 |
| Asia | 107. 9 | 113.3 | 196. 9 | 195. 3 |
| Soviet Unio | 104. 0 | 79. 0 | . 4 | 3 |
| Africa | 13. 8 | 13. 6 | 4.2 | 7. 0 |
| Oceania | 13. 3 | 13. 5 |  | . 1 |
| World total | 418. 1 | 399. 9 | 206. 5 | 211.0 |


| Continent or country | Corn |  | Oats |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1935-39 average | 1946-48 average | $\begin{aligned} & \text { 1935-39 } \\ & \text { average } \end{aligned}$ | 1946-48 <br> average |
| North America | 103. 2 | 98.5 | 49. 0 | 52. 2 |
| South America | 25.0 | 21. 1 | 2. 5 | 2. 2 |
| Europe | 29.6 | 28.4 | 35. 9 | 32. 4 |
| Asia | 34. 2 | 36.1 | 4. 0 | 3. 9 |
| Soviet Union | 10. 0 | 6. 9 | 49.5 | 35. 5 |
| Africa | 18.5 | 19.6 | 1.2 | 1. 3 |
| Oceania | 3 | . 3 | 1. 7 | 2. 0 |
| World total | 220.8 | 210.9 | 143. 8 | 129. 5 |
| Continent or country | Barley |  | Rye |  |
|  | $1935-39$ average | 1946-48 average | $\begin{aligned} & \text { 1935-39 } \\ & \text { average } \end{aligned}$ | $\begin{aligned} & \text { 1946-48 } \\ & \text { average } \end{aligned}$ |
| North America | 15. 5 | 18. 3 | 4. 5 | 3. 2 |
| South America | 2. 1 | 2. 9 | 1. 1 | 1. 6 |
| Europe | 23. 1 | 22. 2 | 33. 3 | 27. 8 |
| Asia | 26. 6 | 38.0 | . 9 | 1. 0 |
| Soviet Union | 37. 8 | 20.5 | 60.8 | 72. 0 |
| Africa | 10. 3 | 8. 2 | . 1 | 2 |
| Oceania | . 7 | 9 |  |  |
| World total | 116. 1 | 111.0 | 100. 7 | 105. 8 |


| Continent or country | Total cereals |  |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 1935-39 } \\ & \text { average } \end{aligned}$ | $\begin{aligned} & \text { 1946-48 } \\ & \text { average } \end{aligned}$ |
| North America | 257. 8 | 271. 3 |
| South America | 54.2 | 50. 2 |
| Europe. | 196. 9 | 178. 1 |
| Asia | 370. 5 | 387.6 |
| Soviet Union | 262. 5 | 214. 2 |
| Africa | 48.1 | 49.9 |
| Oceania | 16.0 | 16.8 |
| World total | 1, 206. 0 | 1,168. 1 |

These data were taken from Foreign Crops and Markets, issued by Office of Foreign Agricultural Relations, L. S. Department of Agriculture.
C. L. Alsberg ${ }^{1}$ estimates that the land now in arable use, together with pasture or grazing land that could be transferred merely by plowing, would make a total of about f. 4 billion acres. In addition he states that there is probably about the same number of acres not arable but suitable for grazing or for tree crops.

The following maps of the world's agriculture were designed to compare the geographic distribution and density of the production of the more important crops and farm animals in the United States with those in foreign countries.

The graphs at the bottom of the dot maps help to visualize the relative importance of the United States in the world's agricultural production. The uniform-sized dots, employed to show distribution of the crops and livestock, do not permit an easy computation of totals. The value of the dot, however, is shown for each map, and from the various graphs, the acreage and production of the important countries can be approximately determined. Because of the distortion resulting from any attempt to represent the curved surface of the earth on a flat map, the ratio of dot area to land area is not the same in all parts of the map. A Van der Grinten projection has been used in making these maps because the Western Hemisphere is intact on the left side and the world's great island (Asia, Europe, Africa) on the right. The fact that all the maps are on the same projection affords an easy comparison of the various factors shown.

The population map was prepared by using small dots for the distribution of people in the rural areas and in towns and small cities having under 100,000 population. The various symbols were used to represent the urban centers-cities with 100,000 or more people. This map should have been reproduced on one of the first pages in this publication, but to give it adequate space. the center spread, pages 24 and 25 were used instead.

When the population map is compared with the geographic-factor maps in the front of the publication, the distribution dot maps of the crops and livestock, as well as with the international-trade maps, one gets an excellent picture of the population pressure areas of the world as related to the surplus agricultural-producing areas and also to those areas that are undeveloped agriculturally.

The international trade maps showing selected commodities are given for prewar years and 194648 to help visualize the agricultural international trade picture. Because of the limited size of the publication and the lack of color to show imports. the maps were made in solid lines for exports and dashed lines or alternate broken bands to show imports. The export countries are shown separately by black circles and the imports are shown

[^2]by squares but are consolidated in areas like Europe to simplify the visual effect of the map.

The question of the productivity of the soil to furnish food for ever-increasing populations has been an important one for some time and will be for years to come. This question is related to many physical factors, and production from the areas not now cultivated will no doubt be expensive projects in most cases where new areas are opened up.

The length of time that the soil of a given area has been under cultivation is an important consideration. It is closely related to the maintenance of soil fertility, the number of people cultivating the land, and to the climate of the region.

Such climatic factors as temperature, rainfall, and prevailing winds affect both type and fertility of soil, as well as the health of the people.

If we compare the United States of America with China, we note that in the United States a few people are scattered widely over a broad virgin land with more than 3 acres of cultivated land to every man, woman, and child, whereas in China the people are toiling in fields tilled for ages and have less than half an acre of land per capita because more than half of China is uncultivable mountain land.

The nature and fertility of the soil is closely related to the means and methods of sustenance and has greatly influenced the distribution pattern of population throughout the world. In recent years, however, this influence has not been so great as it was a few centuries ago, because of the ease with which foodstuffs are now transported from place to place. Also, fond can now be preserved for long periods by such processes as
canning, freezing, drying, pickling, and dehydrating.
To increase the food supplies of the world, more good soil area and higher yields from the present cropland are needed. Soils are responsive to proper management. Their productivity depends on the balance of plant nutrients and on physical condition, structure, consistency, and plasticity. Water-logged soils must be drained; soils in arid areas must be irrigated and made fertile by increasing plant nutrients in the soils; and conservation practices must be applied in mountainous areas or on steep slopes, where erosion is a primary factor.

Considerable improvement in agricultural productivity in the undeveloped areas could be obtained by exchanging knowledge among countries through working agreements of experienced technicians. Through this technical collaboration, more efficient types of plant life and productive methods could extend the area of agricultural production as well as increase the crop and livestock yields, thereby increasing the food production of the world.

The temperature may be too cold, too hot, or too uneven to grow any crops or to allow a growing season sufficiently long for crops to mature. According to estimates of various authorities, from 15 to 30 percent of the total land area is too cold for agricultural production. There are also large areas in arid regions where it is too hot or dry for most crops.

The rainfall may be too little, too much, or too uneven to grow crops. Here again, estimates vary from 15 to 40 percent as to how much of the land area is deficient in rainfall.

## ALPHABETICAL LIST OF ILLUSTRATIONS

Page Page
Apples, production, 1946-48 ..... 27
Barley, production, 1946-48 ..... 17
Cattle, number, 1946-48 ..... 32
Citrus fruit, production, 1946-48 ..... 26
Coffee, production. 1946-48 ..... 31
Corn, production, 1946-48 ..... 16
Cotton, production, 1946-48 ..... 29
Dairy products, production, 1934-38 ..... 36
Flax, acreage, 1946-48 ..... 30
Food:
Self-sufficiency areas ..... 10
Consumption levels ..... 11
Grains, 6 principal, acreage, 1946-48 ..... 13
Horses, number, 1946-48 ..... 35
Identification ..... 5
International trade:
Cotton:
1934-38 ..... 42
1946-48 ..... 43
Flaxseed:
1933-37 ..... 48
1946-48 ..... 49
Rice:
1936-40 ..... 40
1946-48 ..... 41
Soybeans:
1935-39 ..... 46
1946-48 ..... 47
International trade-ContinuedWheat:
1935-39 ..... 38
1946-48 ..... 39
Wool:
1936-40 ..... 44
1946 ..... 45
Land:
Cultivated ..... 12
Forms ..... 6
Milk, utilization, 1934-38 ..... 37
Mules and asses, number, 1946-48 ..... 35
Oats, production, 1946-48 ..... 18
Peanuts, production, 1946-48 ..... 23
Pears, production, 1946-48 ..... 27
Population, urban and rural ..... 24-25
Potatoes, production, 1946-48 ..... 21
Precipitation ..... 9
Rice, production, 1946-48 ..... 19
Rye, production, 1946-48 ..... 15
Sheep, number, 1946-48 ..... 33
Soils ..... 8
Soybeans, production, 1946-48 ..... 20
Sugar (raw value), production, 1946-48 ..... 22
Swine, number, 1946-48 ..... 34
Tobacco, production, 1946-48 ..... 28
Vegetation ..... 7
Wheat, production, 1946-48 ..... 14
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thercfore, because of the dimortion in the Van drer (irinten projection there is serious exageration in area in the northern

[^3]
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 European and Russian Plains, and the Po Valley Plain of Italy.


[^4]
U. S. DEPARTMENT OF AGRIGULTURE

FIgURE 4.-Soil, either directly or indirectly, is essential for the production of meat, grain, vegetables, and many other basic necessities, including viw material for industry. Even though a soil may have a high natural fertility, it is productive only if temperature and moisture conditions are suitable jor


Some soils are best adapted to certain crops-for example, Chernozem (Black soil) Chestnut and Dark Brown soils to wheat production. (See fig. 10.)



 nerthern arcam.


Figure 6.-One method of measuring the level of food production is to compare the amount of food produced in relation to food requirements. Some few highly industralized countries produce only a small part of their food supply and are largely dependent on the surplus trading countries for much of their food requirements. There are also many nations that, in normal years, produce in the aggregate about as much food as they consume, but they may also food products and, through their world trade in food products, they are able to maintain a higher standard of living.

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 fosed sufjly incroames or decereasem.

NEG. 1130 OFFICE OF FOREIGN AGRICULTURAL RELATIONS
 whereas China has about 8 percent of the cultivated land or less than one-half acre per capita.
U. S. DEPARTMENT OF AGRICULTURE United States. (See table 2.)


U S DEPARTMENT OF AGRICULTURE
NEG. 1116 OFFICE OF FOREIGN AGRICULTURAL RELATIONS
Figute: 9.-The principal grains are the most important crops grown. They occupy about one-half of all the cropland
The total acreage of the principal grains for the various countries is shown in this map by circles of various sizes. The sectors of the circles represent the
different kinds of arain, arranged clockwise in decreasing order. Total world acreage of principal grains is represented by the large pie chart in the corner of the inap. This circle is on the same scale as the separate Corn and rice acreages in the 1946 - 48 period were about the same but were in widely scattered areas Corn was mainty produced in the Western
 acreage in the United Statos totaled about 18.2 percent of the world total.
Thre bread grains-wheat and rye-occupy about 43.3 percent of the acreage of principal grains in the world; the coarse grains-corn, oats, and barleyiven though rice occupies conly about one-fifth of the world's principal-grains areas, it is the leading food of about half the people of the world. What, rye, and rice are consumed mainly for food, whereas the coarse grains-corn, oats, and barley-are used mostly for livestock fect. (See fable 3 aratl flys. 10 to 15.)



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U.S. DEPARTMENT OF AGRICULTURE China, India, and Argentina.

 During 1946-48, slightly more than half of the world's wheat was produced in the United States, China, and the Soviet Union.


US DEPARTMENT OF AGRICULTURE

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Corn requires an average growing season of at least 140 days, with an average July temperature of at least $68^{\circ} \mathrm{F}$.

In the United States, hybrid corn has increased the average yield per acre of corn from 25 bushels in prewar to 42.7 in 1948.

More corn is produced per capita in the United States than in any Corn is grown on a great variety of soils that have a fair drainage and good aeration


US DEPARTMENT OF AGRICULTURE

[^5]

U. S. DEPARTMENT OF AGRICULTURE


Owing to the fact that oats are preferable as horse feed, a certain proportion of all land is given to oats.



U.S. DEPARTMENT OF AGRICULTURE


 the world's largest crop-in 1948.
Soybeans are used industrially for oil and meal and, in the United States, for forage and pasture purposes as well.




U.S. DEPARTMENT OF AGRICULTURE


 The course of the line on this map dividing the sugar-producing area into beet and cane is highly generalized.




Jigh yields in (Shina, the United Sitates, and Fremeh West Africa aceonnt principally for the increased world peannt prodnction.


[^6]

## U.S. DEPARTMENT OF AGRICULTURE

Figure 20.-The population of the world is estimated to be about 2,264 million persons. The total area of the earth's surface is 197 million square miles, of which 142 million square miles are covered by water, whereas the land area is only 55 million square miles.

About 10 million square miles of the total land area is located in areas either covered by ice and snow, or in areas too dry to be habitable. About half of the remaining 45 million square miles is very sparsely settled. This leaves only about 22.5 million square miles of land to support the bulk of the human population.

Three-fifths of all the people in the world are located in the densely populated areas of Asia and in certain areas of


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Afriea and Latin America where there is no deetine in birth rate, the death rate is lower, and the grow th in propulaton is great. One-fifth of the population of the word live in southern Gurope, the sovict Union, Japan, and certain other areas of Asia, Afriea, and Latin Ameriea, where there is a deeline in birth and death rates. And one-tifth of all the poople in the world live in Western Europe, North America, Australia, and New Zealant where the population is stable or slonly increasing.

There are 687 cities in the word having a population of 100,000 and over. Of these only 43 have a population more than $1,000,000$ persons.

U. S. DEPARTMENT OF AGRICULTURE

Figure 20.-The population of the world is estimated to be about 2,264 million persons. The total area of the earth's surface is 197 million square miles, of which 142 million square miles are covered by water, whereas the land area is only 55 million square miles.
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NEG 1163 OFFICE OF FOREIGN AGRICULTURAL RELATIONS
Of the world total, oranges constituted 72.9 percent, grapefruit 18.6 percent, lemons 7.5 percent, and limes 1 percent slightly more than 26 billion pounds. fruit was produced in the United States during the 1946-48 period-93 percent of all grapefruit, 46 percent of the lemons, nearly 42 percent of the oranges, There were general increases in each kind of citrus fruit in the United States between the 1935-39 and the 1946-48 periods.
LINE BETWEEN EASTERN
ANO WESTERN EUROPE

 133 million lomatels, or 7 fip percent of this intal.


NEG. 1137 OFFICE OF FOREIGN AGRICULTURAL RELATIONS

 Tobacco can be grown in many different climates, but the productio
保

orld, producing nearly one-half of the world's crop.






US OEPARTMENT OF AGRICULTURE NEG. II52 OFFICE OF FOREIGN AGRICULTURAL RELATIONS
Ficilef: 2f. More than 75 percent of the world's coffee production comes from Latin America and the West Indies. Brazit alone grows more than 50 percent of the total world production more than three
I! 4 f- 18 compared with about 15 pounds in the $1935-39$ periof. Coffee consumption in Beariny 19 pounds per capita were consumed in the average period the prewar preriod to 20 pounde per capita the highest in the world-during the 1946-48 period.
 NEG. 1139 OFFICE OF FOREIGN AGRICULTURAL RELATIONS









 the potato and dairy areas.
$6$

## DAIRY PRODUCTS; OUTPUT IN TEN PRINCIPAL PRODUCING AND EXPORTING COUNTRIES



U S DEPARTMENT OF AGRICULTURE
NEG 1164
OFFICE OF FOREIGN AGRICULTURAL RELATIONS
Figure 31.-The United States is the outstanding dairy-producing country in the world. Nearly 5 billion pounds were produced annually in the prewar period 1934-38 and more than 8 billion pounds annually in the 1946-48 period.

The United States is also the leader in the production of dairy products-butter, cheese, canned milk, and dried milk. Butter production has declined in recent years in the United States, but cheese and canned milk production has just about doubled.

Milk diverted to manufactured products was utilized differently in the various countries, depending on the dietary customs and the price patterns.

Note the changes that have taken place between the prewar and the 1946-48 period as indicated in the above chart.

MILK PRODUCTION AND UTILIZATION IN SPECIFIED COUNTRIES


U S DEPARTMENT OF AGRICULTURE
Figure 32.-The United States had nearly 24 million milk cows during the period $1934-38$. This was more than the total number in the next 3 largest prodncing countries-Germany, France, and Canada. The United States produced more than 105 billion pounds of milk annually in 1934-38, about 2 times as much as Germany, the next largest producer, with 53 billion pounds.

The United Kingdom had the largest milk production per cow- 5,583 pounds: Sweden, 5,327 : and Cermany, 5.270. About 60 percent of the milk of the United Kingdom was used as tluid milk, S0 percent of the milk in Australia was converted to butter, and 26 percent of the milk in Italy was made into cheese. Italy also uscht 22.5 percent of its milk as feed, exceeded only by France, where 23.9 percent of the milk was so utilized.

The United States used 4.4 percent of its milk as canned milk and the V'nited kingdom, 3.5 percent.

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the smallest exporters, with annual shipments of only 63 million bushels.
Wheat from Russia and the Danube Basint exporters, each shipping more than 100 million bushels a year.
Asia, and the Pacific areas also imported substantial quantities of wheat.


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Figure 35.-India, China, and Japan are the largest importers, as well as the largest producers, of rice in the world.
Only 7 percent of the average annual world production of rice during the period $1936-40$ moved in international commerce.
About 94 percent of the rice that was shipped from the surplus-rice-producing countries of Asia went to other countries on that continent. to several African countries and to Cuba and other Latin American countries.



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 of the prewar volame.

U.S. DEPARTMENT OF AGRICULTURE
Figure 37 - During the five prepartment of agriculture neg. ligo office of foreign agricultural relations importance of this trade to the United States is indicated by the fact that the value of cotton exports was about 41 percent of the world's cotton. The號
China, and other parts of the Orient.
18 percent each from South America and Egypt, and the remainder from India and Africa (other than Egypt).
 U 5 DEPARTMENT OF AGRICULTURE
 (1) 1938 38) fikure.
 porion, a dracrase of more than 60 percent. Althoukh the exporta from most of the other commeries

U.S. DEPARTMENT OF AGRICULTURE NEG. IIFT OFFICE OF FOREIGN AGRIGULTURAL RELATIONS
Hemisphere.
than 80 percent of the world's total wool exports.
exports.
Soviet Union account for most of the remainder.
Roughly, about three-fourths of the world output is of apparel type and the remainder carpet-type wool.


Figare: 40- World War II changed the prewar pattern of intcrnational trade in wool materiatly. In 1946 the United States was the chicf deficit eountry of wosl, compared with less than 150 million pominds annually during 1934-38. conntrify were France, the United Kinglom, Belgium, and Italy, (व)
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 Soybeans and soybean oil entering international trade are expressed in terms of bushels of beans.
 US OEPARTMENT OF AGRICULTURE
Figothr, 42. The anmal volume of soybeans entering international trade during the 1946 - 48 period decreased to a mere rickle, compared with that of and the heavy demand at home for soybean products.
United States soybean production ant exports increased rapidly during thisperiod. About 13.9 million bushels of soybeans were shipped from the United Statea in 1946 48, as compared with 4.3 million bushels in the prewar period.

 Argentina, India, and Uruguay are the world's exporters of flaxseed and surplus oil exported primarily between the countries of Europe. Argentina, India, and Uruguay are the world's exporters of flaxseed, and Argentina alone supplies over 80 percent of the exports.
 US DEPARTMENT OF AGRICULTURE U DEPAR nately 75 million bushols duriug the prewar period.
nately 75 million bushels during the prewar period. Juternational trade in flaxsecel practically ceased during the war, and producing countries were confronted with the problem of disposing of their thaxsed other than throngh export chamels. The oil-milling facilities in Argentina, India, ant Uruguay were expanded and now they crush their commerciat supply of soed and expert the: oil and oil-cake.
 and India decreased greatly in $1946-48$ from the prewar period



[^0]:    ${ }^{1}$ Does not include the area of the Antarctic regions.

[^1]:    ${ }^{1} 22$ Provinces (Sikang and Sinkiang not included).

[^2]:    1 C. L. Alsberg, the food stpply avi the migration process limits of land settlement. edited by lisiah Bowman, Council on Foreign Relations, 1937

[^3]:    afol montrorn pares of the map.
    

[^4]:    
    
     construction lumiter, nad pulpweorl supp)lies
    

[^5]:    The groat aversion of barley to acidity is a factor that is favorable to barley in the Mediteranean area
    ()n tho better watererl Chernozem soil lands, barley is replaced by wheat. (Sce figs. 4 and 10 .)

[^6]:    

